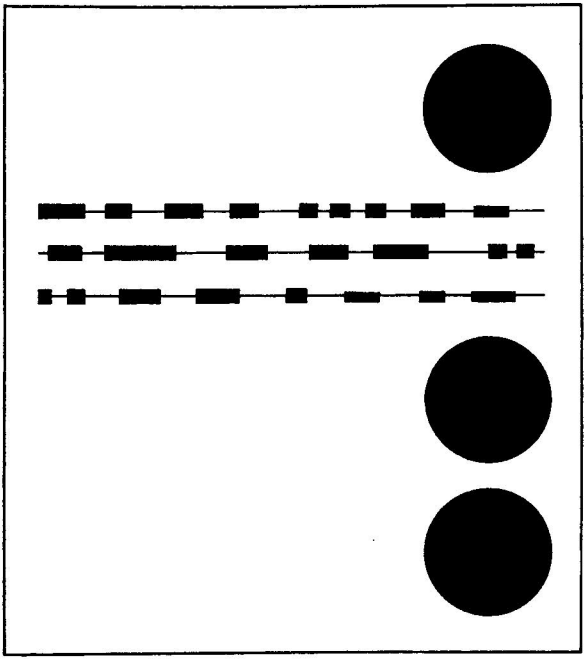
NORDMENDE

Galaxy mesa 9000
6100A

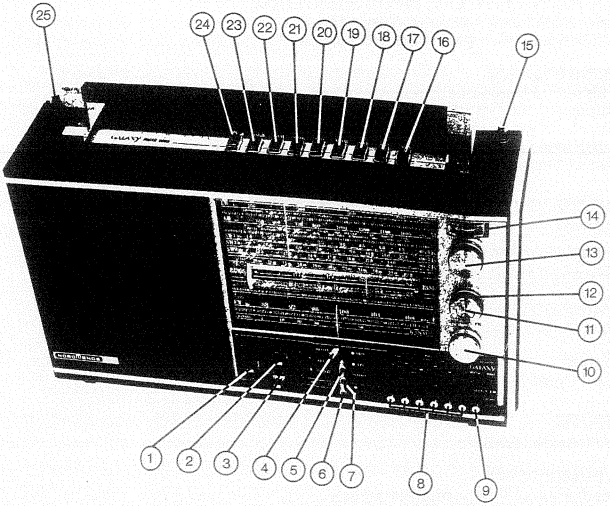
Operating Instructions

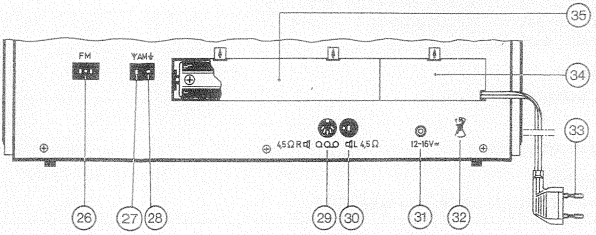


NORDMENDE

Dear NORDMENDE Friend!
We are pleased that you have chosen NORDMENDE, for it really is a high-quality product whose reputation is most excellent not only in Germany, but also throughout the world. You may rest assured that we have done our very best so your NORDMENDE receiver will give you pleasure for many years to come. You will find this transistorised NORDMENDE receiver to be a welcome companion, for it's always "tuned" for pleasure, always ready to provide music and fine entertainment.

NORDMENDE





(1) **Höhenregler**
Treble control / Régulateur pour les sons aigus

(2) **Tiefenregler**
Bass control / Régulateur pour les sons graves

(3) **Lautstärkeregler**
Volume control / Regulateur du volume

(4) **BFO = Empfang von SSB-Stationen**
Reception of SSB-stations /
Réception de émetteurs SSB

(5) **AFC-Schalter**
AFC-switch / Interrupteur AFC

(6) **Ein/Aus**
ON/OFF / Marche-arrêt

(7) **TA/TB-Schalter**
PU/TR switch / Inverseur pick-up/magnétophone

(8) **Festsendereinstellung UKW**
VHF permanent tuning / Réglage des stations fixes sur la FM

(9) **Umschaltung UKW-Festsender-Normalabstimmung**
Changeover switch: VHF permanent tuning – normal tuning /
Commutation stations FM fixes – accord normal

(10) **U/FM-Sendereinstellung (UKW)**
FM tuning / Réglage de l'emetteur
(gamme de modulation de fréquence)

(11) **Knebelschalter für Trommelskala**
Switch for drum dial / Bouton à clé pour le cadran à tambour

(12) **Sendereinstellung für Kurzwellenbänder**
Short wave tuning / Réglage de l'émetteur à ondes courtes

(13) **AM-Sendereinstellung (Mittel-, Lang-, Kurzwelle 1, 2 und 3)**
AM tuning (medium, long and shortwave band 1, 2 and 3) /
Réglage de l'émetteur de modulation en amplitude (ondes moyennes, longues et courtes 1, 2 et 3)

(14) **Anzeigeinstrument / Batterietestschalter**
Indicator Batterytest / Indicateur pour le contrôle de piles

(15) **Teleskopantenne (FM)**
Telescope antenna (FM) / Antenne téléscopique (FM)

(16)-(22) **Tasten für K3, K2, K1, MW, LW, BANDS und UKW**
Keys for SW 3, SW 2, SW 1, AM, LW, BANDS and FM /
Touches pour OC 3, OC 2, OC 1, OM , OL, BANDS et OUC

(23) **Bandbreitentaste für AM**
AM-Bandwidth-Selector / Touche de largeur de bande
(mod. en amplitude)

(24) **Taste für Skalenbeleuchtung**
Key for illumination / Touche pour éclairage

(25) **Teleskopantenne für Kurzwellenbänder**
Telescope antenna for SW bands / Antenne télescopique

(26) **Buchsen für UKW-Antenne**
Jacks for FM antenna / Douilles pour la gamme OUC

(27) **Buchse für Antenne (AM)**
Antenna input jack (AM) / Douille pour antenne extérieure (AM)

(28) **Buchse für Erde**
Ground input jack / Douille pour la mise

(29) **Buchse für TA/TB**
Jack for PU/TR / Fiche de TA/AB

(30) **Buchse für Lautsprecher**
Jack for loudspeacker-box / Prise pour haut-parleur

(31) **Buchse für Fremdspannungsquelle (12–16 V ≅)**
Jack for external power source (12–16 V ≅) /
Fiche de alimentation extérieur (12–16 V ≅)

(32) **Spannungswähler**
Voltage selector / Sélecteur de tension

(33) **Netzstecker**
Mains plug / Fiche de alimentation

(34) **Fach für Netzkabel**
Box for mains cable / Boîtier de câble de alimentation

(35) **Batteriekasten**
Battery box / Boîtier de batterie

Operating Instructions

The multiple power supply possibilities of this receiver make it suitable for universal use:

1. As a portable with its own fitted batteries.
2. As a home receiver powered from the mains.
3. As a stationary set with an external power source (e. g. from a car battery when camping).
4. Operation from a fitted re-chargeable accumulator.

Initial operation

1. Battery operation.
As batteries, the receiver requires 6 monocells each of 1,5 V. The cover of the battery compartment 35 is removed by depressing the two spring catches and the batteries inserted in accordance with the moulded "battery position plan". After replacing the cover, the receiver is ready for operation.

2. Mains operation.
(The voltage selector is factory set for 220 V AC).
The mains cable is stowed in compartment 34. The cover is removed by depressing the spring catch and the cable withdrawn. When the mains plug is inserted in the power supply socket the batteries are automatically switched off and the scales permanently illuminated when the receiver is switched on.

Note! If the mains supply is 110 V AC then the voltage selector switch 32 on the rear of the receiver can be set to the appropriate position with the aid of a coin.

3. External power source.
An external power source of 12 ... 16 V e. g. car battery (camping) can be connected to socket 31. The fitted batteries are then automatically switched off. When the receiver is switched on the scales are permanently illuminated.

4. Operation from an accumulator.
The fitted batteries can be replaced with an accumulator 8 V/2,6 Ah (4G x 3S Sonnenschein). With mains operation the accumulator is automatically charged when the receiver is switched on.

Switching on and off, volume

The receiver is switched on and off with switch 6.
Volume is regulated with the sliding control 3.

Sliding to the right = increases volume
Sliding to the left = decreases volume

Station tuning

The Galaxy mesa 9000 is fitted with two scales:
a) A large surface linear scale.
b) A drum scale for the short wave bands.

The large linear scale will be considered first.

By depressing one of the range keys 16–22 the desired waveband is selected.

The tuning knobs 10 and 13 serve the separate tuning systems for long, medium and short waves 1, 2 and 3 (knob 13) and for the ultra short wave (knob 10). Knob 13 is fitted with a folding handle which permits a rapid setting of the pointer over the entire scale. When the handle is folded in the knob can be used for fine tuning. The selected station is accurately tuned when the needle of the indicating instrument 14 deflects to maximum. To facilitate tuning under poor lighting conditions, a battery operation the scale can be illuminated by depressing button 24. The scale will remain illuminate as long as button 24 is held down.

The abreviations on the linear scale correspond to:

L = Long wave
M = Medium wave
Bands = Band spread short wave bands on the drum scale
U = Ultra-short wave (FM)
K1 = Short wave 1
K2 = Short wave 2
K3 = Short wave 3

The figures on the scale correspond to abreviated frequency units, kHz for medium and long waves, and MHz for short wave and ultra-short wave. Apart from this, the scale for U/FM is marked in channels. The kHz, MHz and channel indication will generally be found against the station name in the programme magazines. Stations can then be located by setting the tuning pointer to the corresponding figure on the scale.

e. g.:	U	92 corresponds to	92 MHz
	M	600 corresponds to	600 kHz
	L	200 corresponds to	200 kHz
	K 1	2,5 corresponds to	2,5 MHz
	K 2	6,0 corresponds to	6 MHz
	K 3	14,0 corresponds to	14 MHz

Fixed station tuning

A great advantage of the NORDMENDE Galaxy mesa 9000 is the fixed station tuning in the FM range. This enables the programming of 6 FM stations, each of which can be immediately received by simply depressing a button. Above the pushbuttons 8 are located small scales each calibrated from 88–108 MHz, the FM (ultra-short) waveband. Each fixed station button has its own scale and indicator pointer, corresponding in miniature to the large linear scale.

To programme the fixed station buttons, the FM range must firstly be switched-in with key 22 and then one of the fixed station buttons depressed. For example:

a) Depress fixed station button "1".
b) By turning the button, tune to a FM station.
c) Depress fixed station button "2". (Button 1 will immediately spring out to its rest position).

d) With button "2" tune-in a second FM station.
e) This procedure is repeated for the remaining 4 buttons.

Each button when depressed will now give immediate reception of its programmed station. Button 9 releases the fixed station buttons, and switches back to the normal FM range scale where tuning is carried out with knob 10.

Short wave tuning with the drum scale

The drum scale enables the easy tuning of a desired transmitter in the bandspread short wavebands from 10 – 80 m. Firstly the key 21 "BANDS" is depressed, which switches the receiver to the drum scale. Then the folding handle on switch 11 is opened and the drum rotated until the desired waveband appears (e. g. 49 m band). Tuning to the required transmitter is carried out with knob 12. The exact tuning point is again shown by the indicator meter 14.

The linear scale of 0 – 100 on the drum is designed for the easy re-locating of transmitters that have been heard before. For example, if you are regular listener to Radio Luxembourg on the 49 m band, once the station is correctly tuned make a note of the pointer reading on the 0 – 100 scale. Re-setting the pointer to this figure will immediately give you your station.
Note: A limited fine tuning can be carried out with knob 13 (especially designed for SSB reception).
Before commencing a "waveband hunt" the short wave primer should first be read. This gives information as to where and when the stations operate and which short wave band is best for reception at any particular time.

Reception of stations operating in SSB

To extend their transmission range, the SW amateurs in increasing numbers are transmitting in the SSB technique (single sideband). When a SSB station is received, it will at first appear to be completely distorted and unintelligible. The BFO switch 4 (Beat Frequency Oscillator) is then switched on and the tuning knob 12 turned slowly left and right until a point is found where the SSB transmission (also CW telegraphy) can be clearly understood. The tuning is now corrected with knob 13 which in the position "Bands" operates as a fine tuner. This alters the high pitched tones corresponding to the natural frequency range of speech. When switching to another band, the BFO switch 4 must be switched off.

Tone

The received tone can be adjusted to individual taste with the Bass control 2 and the Treble control 1.
The normal position for these controls is the mid-setting (figure 3).

Bandwidth key

With stations in the long, medium and all short wavebands

which can be received without distortion, an improvement of the sound quality can be achieved by depressing key 23 (position "breit" = broad). The key can be released by depressing it again, for the position "schmal" = narrow. Narrow band is used for separating two stations which are close together on the scale.

"Broad" = better tone
"Narrow" = higher selectivity

Automatic sharp tuning (AFC)

After a station is tuned in the FM band with either knobs 10 or 8 the AFC should be switched-in with switch 5. The automatic fine tuning then ensures the best possible reception and compensates for tuning adjustment errors.

Should a weak FM station be received which is adjacent to a strong local transmitter, the AFC should be switched off so that the automatic tuning does not swing to the stronger station.

Record-player and tape-recorder operation

The standard 5-pin socket 29 serves for the connection of either a record-player or tape-recorder. The record-player should preferably be fitted with a magnetic pick-up and an equalizing pre-amplifier. The tape-recorder can be employed to record and play-back radio transmissions. To play-back recordings or gramophone records, switch 7 must be in position TA-TB.

Antennae

The receiver is fitted with two ferrite antennae. One for MW and LW and the other for SW 1 and SW 2. By turning the receiver these antennae operate in a directional manner, thus enabling the best possible reception to be attained. The telescopie antenna 15 is for the reception of stations in the FM band. When it is fully extended it can be tilted and turned for the best possible reception. In the immediate vicinity of powerful local transmitters it is recommended that the antenna be not withdrawn to its full length.

The telescopie antenna 25 is used for the short wavebands and SW 3.

Socket 27 is for the connection of an external antenna and socket 28 for an earth connection, these are operational for LW, MW and SW. An external antenna for FM can be connected to socket 26.

Battery replacement

When the button on the indicator instrument 14 is depressed, the instrument will register the battery voltage. The batteries have sufficient power so long as the pointer indicates within the green field. When the pointer only just reaches the start of the green field, then all the batteries must immediately be